to 600 bp sand said bifunctional linker is selected from the group of rigid homobifunctional linkers consisting of:

1,4-disubstituted benzene, 2,7-substituted fluorene, 2,6-substituted naphthalene, 2,6-substituted anthracene, 2,7-substituted phenanthrene, 4,4'-substituted biphenyl, 4,4'-substituted benzoin (C_6H_5-CO-CH-(OH)-C_6H_5), 4,4'-substituted benzil (C_6H_5-CO-CO-C_6H_5), 4,4'-substituted benzophenone (C_6H_5-CO-C_6H_5), 4,4'-substituted diphenylmethane (C_6H_5-CH_2-C_6H_5), 4,4'-substituted stilbene (C_6H_5-CH=CH-C_6H_5), 1,3-substituted allene (CH_2=C=CH_2)

C 1
cont.

and wherein said oligo- or polynucleotide is covalently bound to a functional group of said bifunctional linker through a primary amino group attached, on the 3'- or 5'-terminus through an alkane having a length of from 6 to 18 methylene groups or though a polyether with from 2 to 20 repeating units

and wherein the oligo- or polynucleotides are prepared by amplification.

27. The support according to claim 26, characterized in that said oligo- or polynucleotide is RNA, DNA or PNA.

28. The support according to claim 26, characterized in that said support is made of glass or another material mainly consisting of silica.

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29. The support according to claim 26, said bifunctional spacer having the following structure:

$(XO)_3$ Si-Y-Nu,

wherein

X = C_1-C_3 alkyl,

Y = C_2-C_4 alkylene, and

Nu = a nucleophilic group.

C1
COOH

30. The support according to claim 29, wherein the nucleophilic group is -NH_2 or -NHR, with

R = -CH_2-CH_2-NH_2, -CH_2-CH_2-NH-CH_2-CH_2-NH_2, -CO-NH_2, or SH.

31. The support according to claim 26, wherein said spacer is $(MeO)_3$Si-CH_2-CH_2-CH_2-NH_2.

32. The support according to claim 26, characterized in that said rigid homobifunctional linker has functional groups selected from the group consisting of:

- aldehydes and ketones;
- isocyanates, isothiocyanates;
- carboxylic acids; and
- carboxylic acid derivatives.

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33. The support of claim 32, wherein the carboxylic acid derivatives are selected from the group consisting of:

a) carboxylic acid esters;

b) carboxylic acid chlorides (R-COCl);

c) carboxylic acid azides ($R\text{-}CON_3$); and

d) mixed anhydrides with carbonic acid monoester (R-CO-O-COR').

C1 cont.

34. The support of claim 33, wherein the carboxylic esters are methyl esters, ethyl esters, activated esters, or esters of p-nitrophenol or –hdroxysuccinimide.

35. The support of claim 26 wherein the support does not comprise a polyT-spacer.

36. The support of claim 26 wherein the number of different oligo- or polynucleotides is at least 72.

37. The support of claim 36, wherein the number of different oligo- or polynucleotides is at least 439.

38. Method for identifying and quantifying polynucleotides by labeling the polynucleotides to be analyzed, followed by a hybridization reaction on the support according to claim 26.

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39. A method for establishing transcription profiles comprising the steps of:

- selecting homologous regions of mRNA from a target species and at least one model species;
- selecting amplification primers allowing the amplification of nucleic acids having a length of from 200 to 600 bp from the homologous regions of both the mRNA from said target species and the mRNA from said at least one model species, the amplification primers having a maximum of 1 mismatch per 6 nucleic acids of the amplification primer;
- amplifying corresponding nucleic acids having a length of from 200 to 600 bp for said target species or said at least one model species, using the amplification primers, and immobilizing the nucleic acids obtained on at least one support;
- incubating said at least one support with a DNA or RNA sample to be analyzed, and determining the quantity of bound DNA or RNA.

C1 cont.

40. The method of claim 39, wherein the nucleic acids have a length of 200 to 400 bp.

41. A method for the preparation of a support according to claim 26, wherein:

- said spacer in a polar aprotic solvent is applied to the major surface of the support, followed by removing any excess of unreacted spacer;

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- said linker is dissolved in an anhydrous polar aprotic solvent and reacted with the spacer bound to said major surface;
- the oligo- or polynucleotide modified with an amino group at its 5'- or 3'- terminus through an alkylene group is taken up in a buffer and incubated on said support for binding the oligo- or polynucleotide to a free group of the bifunctional linker, optionally followed by removing any excess free groups of the bifunctional linker; and
- the oligo- or polynucleotide bound to the support is denatured.

C1 cont.

REMARKS

Replacement claims 26-41 and a new Abstract are submitted hereby to correct inadvertent errors in the claims and Abstract submitted with the Amendment filed March 3, 2003, and to, otherwise, more clearly define the instant invention.

Claims 26-28 and 31-41 correspond to claims 11-13 and 15-25, respectively. The subject matter of claim 14 is divided between claims 29 and 30.

Since claims 11-25 are no longer pending, and for the Examiner's convenience, the remarks of the previous amendment are repeated below, but with the claim numbers changed to reflect the numbers of the claims now pending.

A new Abstract was submitted with the previous amendment, as required in the Office Action.

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